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## Straddling the MILLENNIA

*The prospects for the human race may look perilous from where we stand today, but the millennium now coming to an end has something to say to us. It's that we have come a long, long way — which suggests that we still have a long, long way to go...*

There were, broadly speaking, two schools of thought among educated people in Western Europe just before the end of the last millennium. One believed that the advent of the 11th century would bring the return to earth of Jesus Christ, who would preside over 1,000 years of universal contentment. The other was convinced that the world would end at midnight, 1,000 A.D.

In essence, we humans are still thinking along those same two lines a little less than 10 centuries later. The details may differ and the timing may not be so precise, but futuristic thinkers remain divided between those who believe that humankind is bound for bright new uplands of global wellbeing, and those who believe that it is hurtling towards its doom.

On first examination, the weight of evidence would appear to be on the side of the latter. The threats of worldwide famine, environmental collapse, pandemics, climatic change and nuclear or biological warfare (or any combination of these) all argue that the human race is unlikely to last another thousand years, or even half that long.

The most fearful menace to the survival of our species is that sometime in the next few centuries there will be too many of us on this earth for it to support us. World population is multiplying at a staggering rate: at 5 billion, it has increased by 2 1/4 billion in the last half-century. If the current pace continues, it could double in another 50 years.

The number of mouths to feed is proliferating even as hunger stalks the land in developing countries, and there are outbreaks of death by starvation. Some 800 million souls, more than 25 times the population of Canada, live in the mainly malnourished state of what the United Nations calls "absolute poverty." A further 3 billion live in "relative poverty," meaning that they have little left over for material goods, education or health care after they have fed and sheltered themselves.

On top of the pressure on the food supply, overpopulation carries a variety of related perils. Third world countries risk life-threatening pollution as they turn to industrialization to support their burgeoning millions. The forested areas that serve as the lungs of our planet are rapidly being destroyed for fuel or farmland. Meanwhile, immense stretches of existing farmland are turning to desert as a result of overworking the soil.

The spectre of wars, civil upheavals and mass movements of refugees as diverse groups compete for living space puts the finishing touches on a relentlessly grim scenario. It is enough to make one ask how anyone can realistically view the coming century, much less the coming millennium, with any degree of hope.

The answer is that there is hope, and it lies in the certainty that material and social progress will continue to be made, just as it has been made steadily throughout the second millennium which will soon be ending. That progress will doubtless be faster and on a vastly larger scale than anything before it, because the resources behind it — especially the human resources — are vastly greater than ever before.

It should be noted that most of the predictions of impending doom are made from the vantage point of the late 20th century. As the first population phalanx to enjoy instant mass communications, we have an overstimulated sense of danger, which the media gleefully plays upon with constant warnings that this or that can kill us. We seem to relish the thrills and chills

of a good scare story. The self-annihilation of the human race is, of course, the best scare story of all.

The fact that we receive so much current information at such a dizzying pace goads us into thinking largely in terms of what is new and sensational. Hence we tend to exaggerate the importance of current trends in the historical scheme of things.

This here-and-now mentality has bred a certain (to coin a term) "chronocentricity." Academics refer with straight faces to "pre-20th century history," as if everything that has occurred in the past 3,000 years were nothing but a warm-up for the all-consuming present. Only in this self-absorbed era could anyone have the hubris to declare "The End of History," as political scientist Francis Fukuyama did in a best-selling book of that title in 1989.

#### **Progress supplies its own momentum**

Like children with their faces pressed against a window pane, the prophets of "Apocalypse Soon" see everything up close, and everything in their own image. They expect present trends to extend unaltered into the future: the internal combustion engine will run on ad infinitum, tainting the air and sucking up non-renewable oil reserves; wells and wetlands will be drained until they cease to yield water; pollutants will stream out of smokestacks until the ozone layer has been destroyed; in general, little or nothing will be done to relieve the battering which human activities are meting out to the earth.

In making such assumptions, modern soothsayers ignore the reliable military exhortation always to expect the unexpected. Technological developments undreamed-of at present could make the problems that now seem so grave fade into insignificance, like the problem of smallpox, which killed untold millions before vaccination became standard worldwide. They further ignore the historical lesson of what happens when something bad is expected. What happens, usually, is that action is taken to head it off, or at least to cushion its worst effects.

The habit of measuring everything against current or recent events is not conducive to a recognition of the long-term trends that vault over the ages. A long-term view yields quite a different picture of the future from straight-line projections of current trends. For instance, Felipe Fernandez-Armesto, author of the exhaustive history of the last thousand years called *Millennium* (Bantam Press, 1995) dismisses fears that the world's population will overwhelm the means to feed it. "Population trends have always provoked

doom-fraught oracles, because their popular interpreters suppose that every new series will be indefinitely sustained; yet, beyond the short term, expectations based on them have never been fulfilled," he observed.

If we look at the second millennium as a cohesive whole, we can see that nothing, from plagues to famines to global wars, has stopped the human race from making progress. The great thing about progress, incidentally, is that it supplies its own momentum. Like a snowball, it gathers accretions which make it move ever farther and faster. As they work on the problems of humanity, the generations to come will have access to a huge legacy of expertise from the generations that preceded them.

As we stand between one millennium and the next, we should look at what is behind us as well as what might be before us. For if we refer to the last thousand-year landmark prior to this one, we can gather a sense of our own ability to deal with the future. The prime impression we are likely to take away from this exercise is that human capabilities have been expanding exponentially. Pessimists as to the future start from the premise that "people never learn." The story of the millennium is that they do.

#### **Cities, citizenship, and civilization**

In making this point, let us focus on Western Europe, if only because more documentation is available on what happened there than in other regions. A short list of Western European social conditions a thousand years ago runs alphabetically from bigotry through brigandage, despotism, disease, ignorance, illiteracy, insanitation, poverty, slavery, superstition, torture, and vermin galore.

But people were learning even then, and as they did so they began to pull themselves out of the Dark Ages. The wisdom and practical knowledge of antiquity was being revived through translations of long-forgotten works from Greece, Rome and the Arab world. Breakthroughs were made in mathematics, architecture and musical notation. Members of the literate minority were communicating ideas long distance through the newly-developed media of manufactured paper and the quill pen.

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In social terms, however, the great advance out of the murky past was several generations in the future. New cities began to emerge in the late 1200s. With them the institutional foundation of today's modern western society was laid. These prototypical municipalities were administered by guilds of merchants and artisans, and in time their citizens were granted well-defined rights in return for civic responsibilities. Cities gave a crucial boost to learning and innovation by acting as magnets for intellectuals and offering locales for universities.

Citizenship gave rise to public spirit, and in due course hospitals and orphanages made their appearance. These institutions were the first tangible manifestations of what has since become the dominant political philosophy of civilization — the concept that the stronger should support the weaker, and that towards this end, the resources of a society should be shared.

#### **Battling man's inhumanity to man**

As time passed, everyday life became more liveable for a growing number of people. From the 14th through the 18th centuries, the urge to do things better generated a great range of amenities which we now take for granted — eyeglasses, printed books and journals, dental fillings, currency, mail service, running water, street lighting, machine-sewn garments, canned food.

The 18th century stands out as the time when technical progress took off on its present soaring trajectory. The invention of the steam engine ushered in the age of mechanical power, freeing men and women from their dependence on the strength of animals, the wind, or their own straining backs.

That century also spawned the philosophical movement called the Enlightenment, which was to have more of a bearing on the future life of man than all the steam engines put together. For out of it came the theme of all subsequent civilized political

discourse: that one man (women weren't counted in those days; see below) was basically as good as another, and that therefore all had equal rights.

The ideas of Enlightenment philosophers inspired action against man's inhumanity to man, which hitherto had

been practised routinely. Their pronouncements on inherent human rights had a heavy influence on the more thoughtful rulers of the day. Thus serfdom was abolished in several European regimes, and in 1784 France banned slavery, to be followed at length by Great Britain. Frederick the Great of Prussia bucked the accepted tradition of official intolerance — intolerance which could get a person tortured or executed — when he instituted freedom of worship and of the press.

From then on, progress took on a certain inevitability as one development triggered another. The impetus from the 18th century carried over into the 19th, in which new ground was broken, so it seemed, month by month. Many of the key features of "modern" life were invented or discovered before 1900. These include electric power, telecommunications, automobiles, synthetic fabrics, movies, sound recording, and ultra-productive farm machinery.

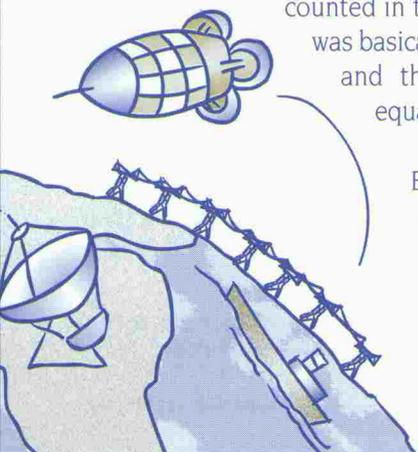
Human ingenuity has absolutely flourished in the present century, if not always to constructive ends; a lot of brain-power has been devoted to weaponry. Still, creative men and women have built on the achievements of the past to give us the mainly agreeable living conditions which we in the developed countries now enjoy. In historical terms, the most striking thing about those conditions is that they are obtainable by the majority, whereas they were once confined to the wealthy. Not for nothing has our time on earth been dubbed "the Century of the Common Man."

#### **Providing a decent life through growth**

Speaking of "man," the record of progress which has been amassed so far is all the more remarkable for the fact that, until very recent times, at least half the population was prohibited from making more than a fraction of its potential contribution to the common wellbeing. If women had been permitted to act as scholars, politicians, inventors, engineers and scientists all along, just think of how far ahead we might be. Other large groups, too, have been barred from participating in progressive endeavours by discrimination and/or lack of education. When the waste of all that human ability is taken into account, one might conclude that the human race has hardly scratched the surface of what it is capable of.

In any case, developed nations have been able to provide a decent life for the bulk of their citizenry through economic growth, which is intertwined with technical and social progress. Yet among some opinion-makers, growth is a dirty word. In 1972, the Potomac Associates of the Massachusetts Institute of

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Technology published a report called *The Limits to Growth* which called for a curtailment of economic activity lest it ruin the world within the next hundred years.

The report was challenged four years later in *The Next 200 Years*, a study by Herman Kahn and his colleagues at New York's Hudson Institute. They made the point that the developed countries of today started out being undeveloped, and that it was economic growth that had carried them to their present stature. It is only logical that the same process will gradually run its course in the underdeveloped countries of today.

It was in this vein that the Hudson group addressed the population/food conundrum. They wrote: "Pessimists argue that ... the 'best land' is already under cultivation — ignoring the fact that most land had to be developed for it to be considered 'best land.'" They calculated that the world's "potential farm acreage is over four times that now being harvested." Thus a global population three times its present size could feed itself by natural means alone, without ever touching such possibilities as turning non-edible materials into food or growing crops without soil.

The Hudson team believes that economic growth in developing countries will automatically curb birth rates, as has happened over the past 150 years in western countries. Their theory is tied to the assumption that improved living conditions will be accompanied by rising levels of education, especially among women of child-bearing age, who marry later when they spend more years in school.

To unabashed optimists like Alvin Toffler, education is the key to the whole question of human survival. He wrote in *The Third Wave*: "Never in history have there been so many reasonably educated people, collectively armed with so incredible a range of knowledge." It is in the application of that body of knowledge — which, remember, is growing every hour of every day — that solutions to the present plight of humanity may be found in forms that are beyond imagining today.

What we *can* imagine today is a world in which our learning can be applied to make many of our present problems simply go away. If cures for deadly diseases have been found in the past, it is reasonable

to expect a cure for cancer. The search for clean energy may discover inexhaustible supplies of non-polluting fuel, or machines that run on no fuel whatever. We have advanced this far on the strength of the knowledge we have gathered ourselves; it is possible that we may one day be sharing knowledge through radio waves with other beings in the universe.

But as far as human contentment is concerned, no advance in technology will matter much if future generations are to live in oppression and terror. Pessimists as to the future fear that desperate people will turn for leadership to demagogues who will impose tyranny. This is in tune with the cynical old refrain that "you can't change human nature." According to cynics, humans will always be governed by fear, greed, hate and other passions. Ergo, the strong will always prey on the weak.

But human nature assuredly does change; you need only look back on the present millennium to prove it. To most present-day residents of western nations, the horrific symbols of the past like the torture dungeon and the slave ship might as well have come from outer space, so little do they have to do with attitudes today. It may strike us as unbelievable that offences as minor as forging a signature carried the death penalty in Britain as late as the 1800s. To be sure, cruelty and injustice persist in western societies, but we nonetheless have managed to put a great psychological distance between ourselves and our grisly ancestry.

Efforts are being made through international cooperation to install at least an approximation of conditions in the western world in the developing countries. The trouble is that developed countries account for barely one-third of the people on earth, and social injustice, violence, despotism and official corruption are still rife in many places where the great majority of humans live.

Given the poverty, environmental damage and strife that abound in large parts of the earth, trying to create a life worth living for everyone on it may seem impossible. But then, the history of the second millennium comprises a chronicle of seeming impossibilities becoming realities.

Can the world be saved? Can it be made a much better place for all of its inhabitants in the process? No one can be sure about that first question; but as to the second, it has been done before, in the developing countries of the distant past.

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